

PROGRAM SCHEDULE

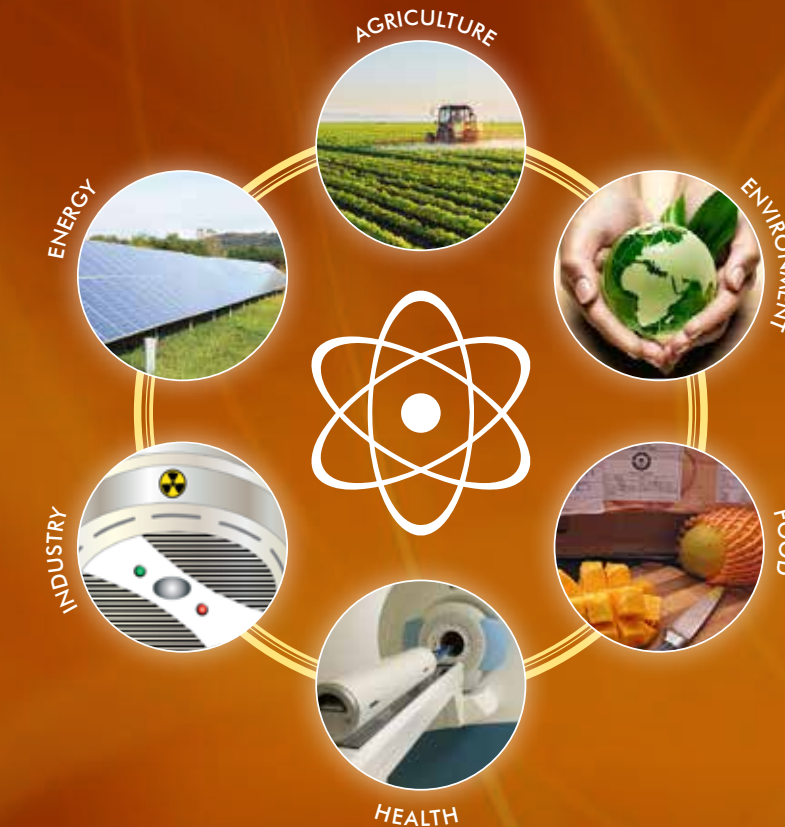
DAY 1: MARCH 25, 2019

INAUGURAL SESSION	10:00- 12:10 hrs
Welcome of dignitaries on dais	10:00-10:05 hrs
SESSION-1	
Welcome Address and Felicitation of Dignitaries : Prof. C. Gopalkrishnan, DG - Pandit Deendayal Petroleum University	10:05-10:15 hrs
About the Symposium : Prof. Chaitanyamoy Ganguly, Advisor to DG-PDPU, Chairman of Conference	10:15-10:25 hrs
Address by Smt. Anju Sharma, IAS, Principal Secretary, Higher and Technical Education, GoG	10:25-10:35 hrs
Address by Shri Sanjay Prasad, IAS, Additional Chief Secretary, Agriculture, Farmers Welfare & Co-operation Department, GoG	10:35-10:50 hrs
Address by Dr. Ajit Kumar Mohanty, Director, Bhabha Atomic Research Centre	10:50-11:05 hrs
Keynote Address by Shri K. N. Vyas, Chairman, AEC & Secretary Dept of Atomic Energy, Govt of India	11:05-11:50 hrs
MoU between BARC and PDPU Background by Shri R.J. Patel, Raja Ramanna Fellow, BARC & Co- Chairman of Conference	11:50-11:55 hrs
Exchange of MoU between BARC & Director General, PDPU	11:55-12:00 hrs
Vote of thanks : Dr. Anurag Mudgal, Head-Department of Nuclear Science & Technology, Pandit Deendayal Petroleum University	12:00-12:05 hrs
Inauguration of exhibition by Chief Guest	12:05-12:10 hrs
HIGH TEA	12:10-12:20 hrs
THEMATIC SESSION 1- APPLICATION OF RADIATION IN FOOD AND AGRICULTURE	12:20 – 13:40 hrs
Role of Nuclear Agriculture in Enhancing the Green Revolution. Dr. S. J. Jambhulkar, NABTD, BARC	12:20- 12:40 hrs
Radiation Technology for Food Preservation. Dr. S. Jamdar, FTD, BARC	12:40 –13:00 hrs
Setting up Gamma Irradiation facility in Gujarat – A Feasibility Study Sh Sudhir Dave, Consultant, Agri Business & Food Irradiation.	13:00-13:20 hrs
Design, Construction Operation and maintenance of Commercial Gamma Irradiation Plant Mr. Shubhasish Bhattacharya, M D, Daver Hydromatics Pvt. Ltd.	13:20-13:40 hrs
LUNCH	13:40-14:25 hrs
THEMATIC SESSION 2: PANEL DISCUSSION WITH SON OF SOILS (In Hindi)	14:25-16:00 hrs
Short Movie on Food, Agriculture & Water Treatment Shri Ravi Shankar Head, PAD, DAE	14:25-14:45 hrs
Panel Discussion : Role of Nuclear Agriculture in Enhancing the Green Revolution & Radiation Technology for Food Preservation • Dr. S. J. Jambhulkar, NABTD, BARC • Dr. S. Jamdar, FTD, BARC • Mr Kiran Chavda Lok Niketan, Banaskantha • VCs of Gujarat State Agriculture Universities	14:45-15:15hrs
Q/A WITH FARMERS BARC/PDPU/VCs of Gujarat State Agriculture Universities	15:15-15:30 hrs
Visit to exhibition for farmers BARC/PDPU	15:30-16:00 hrs
HIGH TEA	16:00-16:30 hrs
THEMATIC SESSION 3- GAMMA IRRADIATION FOR INDUSTRIAL APPLICATIONS	16.30-19:30 hrs
Gamma Irradiation For Sewage Sludge Hygienisation And Production of Manure Dr. Lalit Varshney, Former- Head, RTDD, BARC	16:30-16:50 hrs
Domestic Sewage Sludge : Assessing its potential for Organic Manure ‘ Humanure’ Dr. Anurag Kandya, Dr. C. Ganguly, Mr. Jugal Bhagat	16:50-17:10 hrs
Radioisotope Applications In Industry and Environment Dr. H.J. Pant, IR&AD, BARC	17:10-17:30 hrs
An Overview on Nuclear Instrumentation and its Applications Mr. J. Narendra Reddy, MD, Nucleonics	17:30-17:50 hrs
Commercial irradiator on Gamma Technology Mr. Piyush Srivastava, BRIT	17:50 -18:10 hrs
Cultural Program, PDPU Students	18:30-19:30 hrs
DINNER	19:30 hrs onwards



DAY 2: MARCH 26, 2019

THEMATIC SESSION 4- WATER TECHNOLOGY	
'Water- The Elixir of Life' Dr. Soumitra Kar, BARC	10:00 -10:20 hrs
Isotopes in Water Resource Management Dr. U. K. Sinha, IRAD, BARC	10:20 -10:40 hrs
Renewable Energy based low cost water treatment options Dr. Anurag Mudgal, PDPU	10:40 - 11:00 hrs
HIGH TEA	11:00 -11:15 hrs
THEMATIC SESSION 5: DAE TECHNOLOGY FOR ENTREPRENEURS	
Transfer of Technologies to Industries Dr. Amar Banerji, Head, TT&CD, BARC	11:15-11:35 hrs
DAE Technology for Rural Development (AKRUTI) Smt. Smita Mule, AKTS, BARC	11:35-11:55 hrs
Industrial Technologies Developed at Institute for Plasma Research : Ready for Commercialization Dr. S .K. Nema, IPR	11:55-12:15 hrs
Industrial Applications of Plasma Dr. Alphonsa Joseph, IPR	12:15-12:35 hrs
Gamma Radiation Centre (GRAC) at PDPU, Gandhinagar Mr. Manish Kumar, Mr. Amit Suthat, and Ms. Tanvi Maneria	12:35-12:55 hrs
LUNCH	12:55-13:40 hrs
THEMATIC SESSION 6 – DAE TECHNOLOGIES FOR “SWACCHH BHARAT”	
Hybrid Biofilm-Granular System For Sewage Water Treatment Dr. Y. N. Nancharaiiah, CG BARC	13:40-14:00 hrs
Chlorine Dioxide(ClO ₂) generating polymer system for water disinfection Dr. Hiren Joshi, CG, BARC	14:00-14:20 hrs
Bio-fuel Mr. Kamlesh, GERMI, PDPU	14:20-15:00 hrs
PANEL DISCUSSIONS	15:00-15:45 hrs
HIGH TEA	15:45-16:00 hrs



A two days conference and exhibition on
**“APPLICATIONS OF NUCLEAR ENERGY IN
 FOOD & AGRICULTURE, WATER,
 INDUSTRY AND SEWAGE TREATMENT”**

Date: March 25-26, 2019 Venue: PDPU, Gandhinagar



PDPU DEPARTMENT OF
 NUCLEAR SCIENCE
 & TECHNOLOGY

<http://sot.pdpu.ac.in/nucleareng.html>

Off. Koba- Gandhinagar Highway, Raisan, Gandhinagar - 382 007, Gujarat. India.
 Phone : +91 79 2327 5339, 5437, 5432.

www.pdpu.ac.in

-: Supported By :-



ABOUT PDPU

Pandit Deendayal Petroleum University's 100 acre campus is located in Gandhinagar, which is the capital city of Gujarat and located 23 Km North from a well developed city called Ahmedabad with a population of 8 million people. The city is famous for its remarkable cultural development and social life.

PDPU offers multiple courses ranging from engineering, arts and management along with maximum exposure and opportunities to its students through various national and International exchange programs with Best Universities worldwide. For development of its faculties and staff the University endeavors for various Joint Exchange and Research programs.



“A WORLD CLASS UNIVERSITY WHICH PROVIDES EDUCATION ALONG WITH GREAT OPPORTUNITIES AND SUCCESS TO ITS STUDENTS”

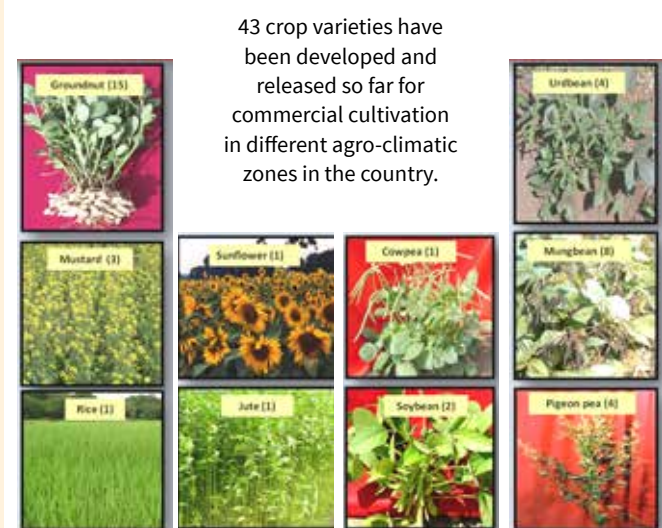
ABOUT BARC

Dr. Homi Jehangir Bhabha conceived the Nuclear Program in India. Dr. Bhabha established the Tata Institute of Fundamental Research (TIFR) for carrying out nuclear science research in 1945. To intensify the effort to exploit nuclear energy for the benefit of the nation, Dr. Bhabha established the Atomic Energy Establishment, Trombay (AEET) in January 1954 for multidisciplinary research program essential for the ambitious nuclear program of India. After the sad demise of Bhabha in 1966, AEET was renamed Bhabha Atomic Research Centre (BARC).

BARC is actively involved in the deployment of non-power applications on a large scale, both industrial and societal. The BARC Centre for Incubation of Technology (BARCIT), spin off technologies, NISARGRUNA (solid biodegradable waste resource management) and Advance Knowledge & Rural Technology Implementation (AKRUTI) programs have been initiated for the benefit of Society. BARC has entered into several technology transfer agreements with private parties in the areas of Nuclear instrumentation, Industrial applications, Medical applications, Environmental applications and health care. As part of management of IPR issues, an IPR cell has also been established.



TROMBAY (BARC) CROP VARIETIES RELEASED FOR COMMERCIAL CULTIVATION



43 crop varieties have been developed and released so far for commercial cultivation in different agro-climatic zones in the country.

OBJECTIVE OF THE MEETING

The two day conference and exhibition aims at :

- Showcasing the technology developed at Bhabha Atomic Research Centre and Board of Radiation, Isotope technology and Institute for Plasma Research for societal benefits.
- Raising awareness amongst Agriculture and Industry Community on Application of Radiation and Radioisotopes.
- Commercial Gamma Irradiation plant for food irradiation and preservation: Potatoes, onion, tomatoes, vegetables spices, fruits grown and produced in Gujarat.
- Radiotracer Application in Oil & Gas, Chemical, Metallurgical Industries.
- Utilization of Gamma Radiography and related tomography in non-destructive evaluation of welds, piping and components in Engineering Industries.
- Application of Gamma Radiation for Munciplaity waste sterilization.
- Gamma Radiation Induced Mutation Breeding for developing high yield food and Hotriculture Crops
- Emerging R&D on Application of Radiation for societal benefits.

ABOUT THE CONFERENCE

Food Security, hygiene and healthcare, waste and water management are the major challenges in India in general and Gujarat in Particular which is emerging and enterprising State on a constant lookout for new opportunities. Radiation Technology utilizing radioisotopes and radiation from electrically-operated machine sources, has made significant contributions in improving industrial production, product quality, material properties, hygienization, shelf-life extension of food products and healthcare. All these applications have directly or indirectly benefited the society in a number of ways.

A two-day conference and exhibition, where DAE will showcase their products & Technologies developed at BARC & IPR for societal benefits, is scheduled on March 25-26, 2019 at PDPU. Conference meeting also aims to discuss the enhancement of Nuclear Agriculture, Food Irradiation and Preservation, Pollution control and municipality waste management in Gujarat. Director BARC, Principal Secretary Agriculture, Government of Gujarat, Vice Chancellors and Senior Scientists of Gujarat State Agricultural Universities and Senior Scientists and Engineers from Nuclear Agriculture & Biology Division, Food Technology Division, BRIT and Radio-isotope group and Technology Transfer Division BARC, IPR will participate in this meeting. The outcome will be a policy document on Non-power application of Nuclear Energy in Gujarat with PDPU as nodal Institution.

Students and professors from science and technology institutes, farmers, agricultural universities, medical and para-medicals are invited along with the professionals to attend.



COMMITTEES

PATRONS:

SHRI K. N. VYAS
Chairman, AEC & Secretary Dept of Atomic Energy, Govt of India

SHRI D. RAJAGOPALAN, IAS, (RETD.)
Chairman, Standing Committee, PDPU,
Former Chief Secretary, GOG

SHRI SANJAY PRASAD, IAS
Additional Chief Secretary, Agriculture, Farmers Welfare and Co-operation Department, GOG

SMT. ANJU SHARMA, IAS
Principal Secretary, Higher and Technical Education, GoG

DR. AJIT KUMAR MOHANTY
Director, Bhabha Atomic Research Centre

DR. C. GOPALAKRISHNAN
Director General, PDPU

DR. CHAITANYAMOY GANGULY
Distinguished Professor, PDPU

DR. SHASHANK CHATURVEDI
Director, IPR

ADVISORY COMMITTEE:

DR. R.J. PATEL
Raja Ramanna Fellow, BARC

SHRI P GOVERDHAN
Controller, BARC

DR. P. D. NAIK
Dean, HBNI

DR. P. K. PUJARI
Associate Director, RC&IG, BARC

DR. V. P. VENUGOPALAN
Associate Director, BSG, BARC

DR. H. PAL
Associate Director, CG, BARC

DR. R. C. BINDAL
Head, Desalination Division, BARC

DR. S. K. GHOSH
Head, Food Technology Division, BARC

DR. M. RAMANAMURTHI
Director's office, BARC

SHRI V.C. SHAH
Advisor to CFC

DR. PALAK SHETH
Director, Planning & Development, PDPU

DR. ANIRBID SIRCAR
Director General, GERMI

DR T. P. SINGH
Director - SOT, PDPU

DR. NIGAM DAVE
Director-SLS, PDPU

PROF. TARUN SHAH
Registrar, PDPU

SHRI ANKUR PANDYA
Chief HR Officer, PDPU

SHRI ABHINAV KAPADIA
CFO, PDPU

SHRI DEVEN PRAJAPATI
Chief Campus Manager, PDPU

ORGANIZING COMMITTEE:

CHAIR

PROF. CHAITANYAMOY GANGULY
Distinguished Professor, Department of Nuclear Science and Technology, PDPU

CO-CHAIR

MR R. J. PATEL
Raja Ramanna Fellow & Former DS and Director, RD & DG, BARC

CONVENER

DR. ANURAG MUDGAL
Head of Department of Nuclear Science and Technology, PDPU

CO- CONVENERS

DR AMAR BANERJI
Head, Technology Transfer & Collaboration Division, BARC

DR. -ING. SURYAKANT GUPTA
Scientific Officer - G
Institute of Plasma Research

MEMBERS:

SHRI JAYESH PATEL
Accounts Officer, PDPU

SHRI MANISH KUMAR
Lecturer, PDPU

SHRI VIPIN SHUKLA
Lecturer, PDPU

DR. ANURAG KANDYA
Assistant Professor, PDPU

DR. S S KACHHWAHA
Professor, PDPU

DR. PRAVIN KODGIRE
Associate Professor, PDPU

SHRI AKHILESH MAGAL
Advisor, Renewable Energy, GERMI

DR. G. RAVI KUMAR
Head, SIRD, BARC

SHRI RAVI SHANKAR
Head, PAD, DAE

SMT. SMITA MULE
Head, AKTS, BARC

DR. S. T. MEHETRE
NA & BT, BARC

DR. H. J. PANT
IR&AD, BARC

DR. SURYAKANT GUPTA
PSED, IPR

DR. SOUMITRA KAR
MDS, BARC

DR. S. GAUTAM
FTD, BARC

SH PIYUSH SRIVASTAVA
BRIT

